



PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

SHEILA C. HOLMAN
Director

XXXX XX, 2016

Mr. Kevin Ham
Vice President
General Shale Brick, Inc.
3015 Bristol Highway
Johnson City, TN 37601

SUBJECT: Air Quality Permit No. 04384T39
Facility ID: 05/19/00009
General Shale Brick, Inc.
Moncure, North Carolina
Chatham County
Fee Class: Title V
PSD Status: Major

Dear Mr. Ham:

In accordance with your completed Air Quality Permit Application for renewal of your Title V permit received September 29, 2015, we are forwarding herewith Air Quality Permit No. 04384T39 to General Shale Brick, Inc., State Road 1923, Moncure, Chatham County, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT 2." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Chatham County has triggered increment tracking under PSD for PM-10, SO₂, and NO_x. However, this permit does not consume or expand increments for any pollutant.

This Air Quality Permit shall be effective from XXXX XX, 2016 until XXXX XX, 2021, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact David B. Hughes at (919) 707-8411.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Heather Ceron, EPA Region 4 (Permit and review),
Raleigh Regional Office
Connie Horne (cover letter only)
Central Files

General Shale Brick, Inc.
Air Quality Permit No. 04384T39

Attachment 1: Summary of Changes to the Permit

The following table provides a summary of changes as part of this Title V permit renewal:

Page Number	Section Number	Change
Attachment 2	Insignificant Activities	-removed one propane vaporizer per Permittee request
Cover	-	-amended all dates and permit revision numbers
All	Header	-amended permit revision number
5 & 18	Source Table & 2.1 D	-changed Bagfilter Control Device ID No. CD-CR7BF to CD-CR7BF1
7	2.1 A	-clarify emission source with associated control device(s)
8	2.1 A (Table)	-removed 15A NCAC 02Q .0705 (repealed) -added 15A NCAC 02Q .0711
9	2.1 A.2	-added POS and AOS heading where appropriate
14	2.1 B	-clarify emission source with associated control device(s)
15	2.1 B.1.c	-clarify emission source with associated control device(s)
	2.1 B.1.c.ii	-corrected rule cross reference
	2.1 B.1.e	-updated shell language
17	2.1 C.2.c	-updated shell language
18	2.1 D	-clarify emission source with associated control device(s) -changed Bagfilter Control Device ID No. CD-CR7BF to CD-CR7BF1
19	2.1 D.1.d.ii	-corrected rule cross reference
	2.1 E	-clarify emission source with associated control device(s)
20	2.1 E (Table)	-added sources not subject to Subpart OOO
	2.1 E.1.c	-updated shell language
	2.1 E.2.c	-updated shell language
21	2.1 E.2.e.iv	-updated shell language
22	2.1 F.1.b	-updated shell language
24	2.1 G.1.d	-clarify emission source with associated control device(s)
	2.1 G.1.d.ii	-corrected rule cross reference
25	2.1 G.2.c	-updated sell language
	2.1 H	-clarify emission source with associated control device(s)
	2.1 H.1.a	-clarify emission source with associated control device(s)
	2.1 H.1.c	-clarify emission source with associated control device(s)
27	2.2 A (Table)	-removed 15A NCAC 02Q .0705 (repealed)
29	2.2 A.2.b	-updated shell language
30	2.2 A.4	-removed 15A NCAC 02Q .0705 (repealed)
30 to 39	General Conditions	-updated shell conditions (v4.0 12/17/15)
40	List of Acronyms	-updated to current list of acronyms

General Shale Brick, Inc.
Air Quality Permit No. 04384T39

Attachment 2: List of Insignificant Activities under 15A NCAC 02Q .0503(8)

Emission Source ID	Emission Source Description
IES-K4F.1, IES-K4F.2, and IES-K4F.3	Box feeder, conveying system, and storage tank for line 4
IES-SD	Wood receiving, non-pneumatic handling and conveying, and storage operations
IES-CP	Open clay storage piles
IS-3	Screened clay conveying and handling operation for kiln 1 and 2
IS-4	Screened clay conveying and handling operation for kiln 3 and 4
IES-RECLAIM	Reclaimer building storage piles
IES-F-CO-C1 through IES-F-CO-C5 and IES-F-CO-2	Coating operations including five conveyors and reclaimer
IS-7.1 through IS-7.8	Six sand coating piles and two conveyers
IES-F-CH6	Existing raw material handling and conveying operations
IS-8.1 through IS-8.9	Kiln 3 raw material handling operations consisting of a storage pile, box feeder, six conveyors, and a storage bin
I-F-CH-H and I-F-CH-AF	One hopper (50 ton capacity) and one apron feeder
IES-VS1, IES-VS2, IES-VS4, and IES-VS5	Four package-type kiln car vacuuming systems
IES-T1	One 350 gallon brick oil tank
IES-T2	One 350 gallon gear oil tank
IES-T3	One 275 gallon waste oil tank
IES-T4	One 1,000 gallon diesel tank
IES-T5	One 1,000 gallon gasoline tank
I-ES-K1D1	One brick dryer associated with Kiln 1
I-ES-K2D1	One brick dryer associated with Kiln 2
IF-BH-MR-DH and IF-BH-MR-C	One dump hopper and one conveyor at the Brickhaven site
I-F-Coal-CP	Coal Pile
I-F-Coal-CH	Coal Hopper
I-F-SSC	Sand Conveyor
IES-VS3	Hi-Vac vacuum system for Kiln 3

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in

determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit”.

3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled “Specific Permit Conditions Regulatory Guide.” The link to this site is as follows:
<http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.



State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
04384T39	04384T38	XXXX XX, 2016	XXXX XX, 2021

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **General Shale Brick, Inc.**
Moncure Facility

Facility ID: **1900009**

Facility Site Location: **300 Brick Plant Road**
City, County, State, Zip: **Moncure, Chatham County, North Carolina 27559**

Mailing Address: **300 Brick Plant Road**
City, State, Zip: **Moncure, North Carolina 27559**
Application Number: **1900009.15A**
Complete Application Date: **September 29, 2015**
Primary SIC Codes: **3251**

Division of Air Quality,
Regional Office Address: **Raleigh Regional Office**
1628 Mail Service Center
Raleigh, North Carolina 27699-1628

Permit issued this XXth day of XXXX 2016.

William D. Willets, P.E., Chief, Permitting Section
By Authority of the Environmental Management Commission

Table Of Contents

SECTION 1: PERMITTED EMISSION SOURCE (S) AND ASSOCIATED
AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

2.1- Emission Source(s) Specific Limitations and Conditions

(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)

2.2- Multiple Emission Source(s) Specific Limitations and Conditions

(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)

SECTION 3: GENERAL PERMIT CONDITIONS

ATTACHMENT

List of Acronyms

SECTION 1 - PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices:

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	Brick Tunnel Kilns			
	BRICK PROCESSING LINES 1 AND 2 – CAPE FEAR PLANT #24			
3, 7-14, & 27-30	ES-K1 and ES-K2 02D .1109 Case By Case MACT	Two wood/natural gas-fired brick tunnel kilns (20.3 million Btu per hour heat input and 13.7 tons per hour fired brick production rate)	N/A	N/A
	ES-WD1,2	One rotary sawdust dryer (5.59 tons per hour drying capacity; heated with recycle heat from kilns 1 and 2 with natural gas used as supplemental fuel)	CD-C1 and CD-C2	Two simple cyclones operating in parallel (89 inches in diameter each)
	BRICK PROCESSING LINE 3 – BRICKHAVEN PLANT #25			
3, 7-14, & 27-30	ES-K3K 02D .1109 Case By Case MACT	POS One natural gas/propane-fired brick tunnel kiln (25.9 million Btu per hour heat input and 20.55 tons per hour maximum fired brick production rate) AOS One coal/natural gas/propane-fired brick tunnel kiln (25.9 million Btu per hour heat input and 20.55 tons per hour maximum fired brick production rate)	CD-K3DLA	Dry limestone adsorber
	ES-K3D1, ES-K3D2, and ES-K3D3	Three natural gas/propane-fired brick dryers (4.43 million Btu per hour heat input)	N/A	N/A
	BRICK PROCESSING LINE 4 – BRICKHAVEN PLANT #25			
3, 7-14, & 27-30	ES-K4K 02D .1109 Case By Case MACT	POS One natural gas/propane-fired brick tunnel kiln (25.9 million Btu per hour heat input and 20.55 tons per hour maximum fired brick production rate) AOS One coal/natural gas/propane-fired brick tunnel kiln (25.9 million Btu per hour heat input and 20.55 tons per hour maximum fired brick production rate)	CD-K4DLA	Dry limestone adsorber
	ES-K4D1, ES-K4D2, and ES-K4D3	Three natural gas/propane-fired brick dryers (4.43 million Btu per hour heat input)	N/A	N/A

Page Nos.	Coal Processing System			
4, 6, 25-26 & 27-30	ES-Coal-CC	Coal crusher	CD-Coal-CC	One bagfilter (4.7:1 air to cloth ratio)
	Wood Fuel/Sawdust System			
4, 14-16, & 27-30	ES-WFS-SD-SC1 and ES-WFS-SD-SC2	Two 8 x 8 screens	CD-SD-DC1 and CD-SD-DC2	Two dust collectors (8.17:1 and 8.06:1 air to cloth ratios, respectively) installed one each
	ES-WFS-SD-CYC	Cyclone	CD-SD-DC2	Dust collector (8.06:1 air to cloth ratio)
	ES-WFS-SD-HM	Hammermill	CD-WFS-SD-CYC and CD-SD-DC2	Cyclone (42 inches in diameter) and dust collector (8.06:1 air to cloth ratio)
	ES-WFS-SD-SDS	Sawdust silo	CD-SD-BV1	One bin vent filter (4.44:1 air to cloth ratio)
	ES-WFS-SD-SH	Surge hopper	CD-SD-BV2	One bin vent filter (4.44:1 air to cloth ratio)
	ES-WFS-SD-CV1 and ES-WFS-SD-CV2	Transfer screw conveyor and screw feed conveyor	CD-SD-DC1	Dust collector (8.71:1 air to cloth ratio)
	ES-WFS-SD-CV3	Enclosed conveyor	N/A	N/A
	Coatings Dryer			
4, 16-18, & 27-30	ES-CD-8	One natural gas-fired rotary drum coatings dryer (250,000 Btu per hour heat input; 3.45 tons per hour drying capacity)	CD-CD8BF	One bagfilter (2.05:1 air to cloth ratio)
	Clay Handling Equipment (200 tons per hour maximum capacity)			
4, 5, 19-21 & 27-30	F-PC NSPS – Subpart OOO	Primary crusher	N/A	N/A
	F-SS1 and F-SS2 NSPS – Subpart OOO	Two scalping screens	N/A	N/A
	F-SGS NSPS – Subpart OOO	Secondary crusher	N/A	N/A
	F-FS1 and F-FS2 NSPS – Subpart OOO	Two single deck screens	N/A	N/A
	F-FS3, F-FS4, and F-FS5 through F-FS9 NSPS – Subpart OOO (F-FS3 and F-FS4 only)	One bank of seven finishing screens	N/A	N/A
	F-FC4 and F-FC5 NSPS – Subpart OOO	Finishing conveyors #4 and #5	N/A	N/A

4, 5, 19-21 & 27-30	F-C-CFBH NSPS – Subpart OOO	Intersite conveyor	N/A	N/A
	Grinding and Screening Operations (184 tons per hour)			
5, 21-23, & 27-30	F-CH-C1 NSPS – Subpart OOO	One impact crusher	N/A	N/A
	F-CH-SS1 and F-CH-SS2 NSPS – Subpart OOO	Two scalping screens	N/A	N/A
	F-CH-H1 and F-CH-H2 NSPS – Subpart OOO	Two hammermills	N/A	N/A
	F-CH-FS1, F-CH-FS2, F-CH-FS3, and F-CH-FS4 NSPS – Subpart OOO	Four finishing screens	N/A	N/A
	F-CH-FC F-CH-SSFC F-CH-P1 and F-CH-P2 F-CH-RC F-CH-BC F-CH-CFC F-CH-T1 and F-CH-T2 F-CH-HFC1 and F-CH-HFC2 F-CH-TC1 and F-CH-TC2 F-CH-SFC1, F-CH-SFC2, F-CH-SFC3, and F-CH-SFC4 NSPS – Subpart OOO	Seventeen conveyors including: One feed, One scalping, Two product, One reversing, One Brickhaven, One Cape Fear, Two tailings, Two hammermill feed, Two trampolin, and Four screen feed	N/A	N/A
	Texturizing Operations			
5, 6, 18-19 & 27-30	ES-CR5 and ES-CR6	Two texturizing operations for Lines 1 and 2	CD-CR6BF	One bagfilter (6,096 square feet of filter area)
	ES-CR7 and ES-CR8	Two texturizing operations for Lines 3 and 4	CD-CR7BF1, CD-CR7BF2, and CD-CR7BF3	Three bagfilters (6,096, 4,062, and 3,040 square feet of filter area, respectively)
	Block Plant			
5, 6, 23-25 & 27-30	ES-BP-FAS	Flyash silo (11 tons per hour capacity)	CD-BP-BV1	One bin vent filter (227 square feet of filter area)

5, 6, 23-25 & 27-30	ES-BP-CS	Cement silo (10 tons per hour capacity)	CD-BP-BV2	One bin vent filter (227 square feet of filter area)
	ES-BP-BM	Batch mixer (39.97 tons per hour capacity)	CD-BP-BH1	One bagfilter (535 square feet of filter area)
	Sand Silo System			
5, 6, 18-19 & 27-30	ES-SS	Sand silo storage	CD-SS-BV3	One bin vent filter (170 square feet of filter area)
	Rumbler System			
4, 6, 25-26 & 27-30	ES-RUMBLE	Rumbler system	CD-RUMBLE	One bagfilter (2,292 square feet of filter area)

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, record keeping, and reporting requirements as specified herein:

A. Brick tunnel kilns 1, and 2 and associated dryer:

Two wood/natural gas-fired brick tunnel kilns (ID Nos. ES-K1 and ES-K2) and associated sawdust rotary dryer (ID No. ES-WD1,2);

Brick tunnel kilns 3 and 4 and associated dryers:

One natural gas/propane/*coal-fired brick tunnel kiln (ID No. ES-K3K) and associated dry limestone adsorber (ID No. CD-K3DLA) and the three associated natural gas/propane-fired brick dryers (ID Nos. ES-K3D1, ES-K3D2, and ES-K3D3); and

One natural gas/propane/*coal-fired brick tunnel kiln (ID No. ES-K4K) and associated dry limestone adsorber (ID No. CD-K4DLA) and the three associated natural gas/propane-fired brick dryers (ID Nos. ES-K4D1, ES-K4D2, and E4-K4D3)

*** Denotes AOS for kilns ES-K3K and ES-K4K, refer to issuance of Title V Permit 04384/T8-changing the fuel from coal to natural gas/propane.**

The following table provides a summary of limits and/or standards for the brick tunnel dryer and kiln

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	$E = 4.10 P^{0.67}$ for processes ≤ 30 tons per hour $E = 55.0 P^{0.11} - 40$ for processes > 30 tons per hour where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
visible emissions	40 percent opacity (kilns 1 and 2 and sawdust dryer) 20 percent opacity (kilns 3 and 4 and associated dryers)	15A NCAC 02D .0521(c) 15A NCAC 02D .0521(d)
Filterable PM	Affected Sources: ID Nos. ES-K1 and ES-K2 Implement best work practices Affected Sources: ID No. ES-K3K and ES-K4K 0.17 pounds of filterable PM per ton of brick produced (limit for POS and AOS)	15A NCAC 02D .1109 112(j); Case-by Case MACT
HCl-equivalent	18.29 pounds per hour from all four kilns, combined (POS/AOS)	15A NCAC 02D .1109 112(j); Case-by-Case MACT
Odors	Odorous emissions must be controlled - Section 2.2.A. 1., State-enforceable only	15A NCAC 02D .1806
toxic air pollutants	Exemption to bypass control device and continue operation of kiln for up to 4 percent of kiln annual operation (350 hours) See Section 2.2. A.2, State-enforceable only	15A NCAC 02D .1100

Regulated Pollutant	Limits/Standards	Applicable Regulation
toxic air pollutants	Exemption to bypass control device and continue operation of kiln for up to 4 percent of kiln annual operation (350 hours) See Section 2.2. A.3, State-enforceable only	15A NCAC 02Q .0711

1. 15A NCAC 02D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the brick tunnel kilns (**ID Nos. ES-K1 and ES-K2**) and sawdust rotary dryer (**ES-WD1,2**) that are discharged into the atmosphere shall not exceed a combined allowable emission rate as calculated by the following equation:

$$E = 55 \times P^{0.11} - 40$$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

- b. Emissions of particulate matter from the brick tunnel kilns (**ID Nos. ES-K3K, and ES-K4K**), and the brick dryers (**ID Nos. ES-K3D1, ES-K3D2, ES-K3D3, ES-K4D1, ES-K4D2, and ES-K4D3**) that are discharged into the atmosphere shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67}$$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.A.1.a and b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

- d. To ensure compliance, the Permittee shall perform an inspection of each brick tunnel kiln and the sawdust rotary dryer in accordance with the following:
- every six months, perform a visual inspection of each brick tunnel kiln and dryer emissions ductwork systems for leaks, holes, or disrepair; and
 - every six months, perform a visual inspection of each brick tunnel kiln's fuel combustion system.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if inspections of the system ductwork or fuel combustion systems are not performed.

Recordkeeping [15A NCAC 02Q .0508(f)]

- e. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
 - the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - the results of any corrective actions performed.
- The Permittee shall be deemed in non-compliance with 2.1 A.1.a.and b. if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- f. The Permittee shall submit, in writing a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar

year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from the wood/natural gas-fired brick tunnel kilns (**ID Nos. ES-K1 and ES-K2**), the natural gas/propane/*coal-fired brick tunnel kilns (**ID Nos. ES-K3K, and ES-K4K**), the natural gas-fired sawdust dryer (**ES-WD1,2**), and the natural gas/propane-fired brick dryers (**ID Nos. ES-K3D1, ES-K3D2, ES-K3D3, ES-K4D1, ES-K4D2, and ES-K4D3**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

Primary Operating Scenario (POS)

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Alternative Operating Scenario (AOS)

Permittee shall notify the Regional Office 30 days prior to firing coal in tunnel kilns (**ID Nos. ES-K3K, and ES-K4K**) and perform testing within 180 days of commencement of coal firing.*

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f) and 15A NCAC 02D .2601]

POS

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from natural gas, propane, and wood firing for these sources.

AOS

- d. The maximum sulfur content of any coal received and burned in the kilns shall not exceed 1.0 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the sulfur content of the coal exceeds this limit. AOS - Permittee shall notify the Regional Office 30 days prior to firing coal in tunnel kilns (**ID Nos. ES-K3K, and ES-K4K**) and perform testing within 180 days of commencement of coal firing.

AOS

- e. To ensure compliance, the Permittee shall monitor the sulfur content of the coal by using coal supplier certification per total shipment received. The coal supplier certification shall be recorded in a logbook (written or electronic format) per total shipment and include the following information:
- the name of the coal supplier;
 - the maximum sulfur content of the coal received per total shipment;
 - a statement verifying that the methods used to determine the maximum sulfur content of the coal was in accordance with the following:
 - sampling -- ASTM Method D 2234;
 - preparation -- ASTM Method D 2013;
 - gross calorific value (Btu) -- ASTM Method D-5865
 - moisture content --ASTM Method D 3173;
 - sulfur content -- ASTM Method D 3177 or ASTM Method D 4239; and

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the sulfur content of the coal is not monitored and recorded.

Reporting [15A NCAC 02Q .0508(f)]

AOS

- f. The Permittee shall submit a summary report of the coal supplier certifications postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June a certified statement signed by the responsible official that the records of coal supplier certification submitted represent all of the coal fired during the reporting period. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the brick tunnel kilns (**ID Nos. ES-K1 and ES-K2**) and the sawdust dryer (**ID No. ES-WD1,2**) shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity.
- b. Visible emissions from the brick tunnel kilns (**ID Nos. ES-K3K, and ES-K4K**) and brick dryers (**ID Nos. ES-K3D1, ES-K3D2, ES-K3D3, ES-K4D1, ES-K4D2, and ES-K4D3**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.3.a. and b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

POS

- d. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas/propane/wood in these sources.
- AOS**
- e. To ensure compliance, once a week while firing coal the Permittee shall observe the emission points of these sources for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.3.b. above.If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.
- AOS**
- f. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

AOS

- g. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02D .1109: CAA § 112(j); Case-by-Case MACT for Brick Manufacturers

- a. The initial compliance date for the emissions standards, work practice standards, and associated monitoring, recordkeeping, and reporting requirements listed below is **July 29, 2015**. These conditions need not be included on the annual compliance certification until after the initial compliance date.

Emissions Standards [15A NCAC 02D .1109]

- b. Emissions of the following regulated pollutants shall not exceed the emissions limits listed below:
 - i. **Filterable PM:**
 - (A) 0.17 lbs/ton for the large tunnel kilns (**ID Nos. ES-K3K and ES-K4K**).
 - (B) The tunnel kilns (**ID Nos. ES-K1 and ES-K2**) shall comply with work practice standards.

- ii. HCl-equivalent: 18.29 lbs/hr from all tunnel kilns (**ID Nos. ES-K1, ES-K2, ES-K3K, and ES-K4K**). HCl-equivalent is defined by the following equation:

$$E = E_{\text{HCl}} + E_{\text{HF}} \cdot (\text{RfC}_{\text{HCl}} / \text{RfC}_{\text{HF}})$$

Where:

E	=	HCl-equivalent emission rate (in lbs/hr)
E_{HCl}	=	HCl emission rate (in lbs/hr);
E_{HF}	=	HF emission rate (in lbs/hr);
RfC_{HCl}	=	Reference concentration for HCl (20 $\mu\text{g}/\text{m}^3$); and
RfC_{HF}	=	Reference concentration for HF (14 $\mu\text{g}/\text{m}^3$).

- iii. Routine Maintenance Periods: The limits above apply at all times except for periods of routine maintenance during which the Permittee may bypass the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) and continue operating the kilns (**ID Nos. ES-K3K and ES-K4K**) for up to 4 percent of the annual operating uptime. The Permittee must minimize HAP emissions during the bypass period and must minimize the time period during which the kiln is operating and the control device is offline.

The Permittee shall follow the procedures in 15A NCAC 02D. 0535 for any excess emissions that occur during periods of startup, shutdown, or malfunction.

Testing [15A NCAC 02Q .0508(f)]

- c. The Permittee shall conduct an initial compliance test for all pollutants listed in Section 2.1 A.4.b. above within 180 days of the initial compliance date, unless the NC DAQ – SSCB approves a previously conducted performance test as an equivalent compliance demonstration. Testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ. Testing shall be completed on one wood/natural gas-fired brick kiln and one natural gas/propane/*coal-fired brick kiln. The Permittee shall not combust coal in kilns (**ID Nos. ES-K3K and ES-K4K**) under the POS and shall notify the Regional Office 30 days prior to firing coal (i.e., under the AOS) and perform testing as outlined in this condition within 180 days of recommencement of coal firing.
- i. Measure pollutant emission concentrations while operating at the maximum production level, as follows:
- (A) Particulate Matter: PM testing is only required at the large tunnel kilns (**ID Nos. ES-K3K and ES-K4K**). Use Method 5 in 40 CFR 60, Appendix A.
 - (B) HF & HCl: HF and HCl testing is required for all the tunnel kilns, unless an alternative test plan is approved by the NC DAQ – SSCB for demonstrating compliance with the total HCl-equivalent emission limitation in Section 2.1.A.4.b.ii. Use **either** of the following methods:
 - (1) Use Method 26 or 26A in 40 CFR 60, Appendix A. Method 26A may only be used when no acid PM (e.g., HF or HCl dissolved in water droplets emitted by sources controlled by a wet scrubber) is present.
 - (2) Use Method 320 of 40 CFR 63, Appendix A. Follow the analyte spiking procedures of Section 13 of Method 320 unless you can demonstrate that the complete spiking procedure has been conducted at a similar source.
- ii. Establish the operating limit for the limestone feeder setting at the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) using data from the limestone feeder during the performance test. Establish the limestone feeder setting at least one week prior to the performance test and maintain the feeder setting for the one-week period that precedes the performance test and during the performance test.
- iii. Document the source and grade of limestone used at the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) during the performance test using records of limestone purchase.
- Performance tests may not be conducted during periods of startup, shutdown, or malfunction. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109 if the required tests are not conducted, or if the results of the emissions tests exceed the limits in Section 2.1 A.4.b. above.
- d. In the event the Permittee combusts coal, under the provisions of NCGS 143-215.108, The Permittee shall conduct an initial compliance test for all pollutants listed in Section 2.1 A.4.b. above within 180 days of the recommencement of firing coal, unless the NC DAQ – SSCB approves a previously conducted performance test as an equivalent compliance demonstration. Testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ. Testing shall be completed within 180 days of recommencing the firing of coal (AOS) in the natural gas/propane/coal-fired brick kilns (**ID Nos. ES-K3K and ES-K4K**) unless an alternate date is approved by DAQ. Performance tests may not be conducted during periods of startup, shutdown, or malfunction. The Permittee shall

be deemed in non-compliance with 15A NCAC 02D .1109 if the required tests are not conducted in accordance with Section 2.1 A.4.c., or if the results of the emissions tests exceed the limits in Section 2.1 A.4.b. above.

Work Practice Standards [15A NCAC 02Q .0508(f)]

- e. The Permittee shall perform annual inspection and maintenance of the tunnel kilns (**ID Nos. ES-K1 and ES-K2**) as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
- Conduct a visual inspection of the ductwork system for each tunnel kiln for leaks, holes, or disrepair; and,
 - Inspect each burner, and clean or replace any components of the burner as necessary;
 - Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.

The Permittee shall conduct at least one inspection per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the affected tunnel kilns not inspected and maintained as required above.

Monitoring [15A NCAC 02Q .0508(f)]

- f. The Permittee shall maintain a pressure drop across the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) at the large tunnel kilns (**ID Nos. ES-K3K and ES-K4K**).

- The Permittee shall install, operate, and maintain a pressure measurement device at the DLAs.
- Once per calendar day, the Permittee shall record the pressure drop across the DLAs. The record shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these monitoring and recordkeeping requirements are not met or if the Permittee does not maintain a pressure drop across the DLAs, except during routine maintenance periods as provided for in Section 2.1.4.b.iii. of this permit.

- g. The Permittee shall maintain an adequate amount of limestone in the limestone hopper, storage bin (located at the top of the DLAs), and DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) at all times.

- Once per day, the Permittee shall verify that the limestone hopper and storage bin at the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) contain adequate limestone and record the results.
- The record of the daily check shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these monitoring and recordkeeping requirements are not met or if the Permittee does not maintain an adequate amount of limestone as provided above.

- h. The Permittee shall use the same grade of limestone at the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) from the same source as was used during the performance test. The Permittee shall maintain records of the source and grade of limestone used. The records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these records are not maintained

- i. The Permittee shall maintain the limestone feeder setting at the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) at or above the level established during the performance test.

- Once per day, the Permittee shall check and record the limestone feeder setting to verify that it is being maintained at or above the level established during the performance test.
- The record of the daily check shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these monitoring and recordkeeping requirements are not met or if the Permittee does not maintain the limestone feeder setting as provided above.

- j. The Permittee shall maintain no visible emissions from the DLAs stacks (**ID Nos. CD-K3DLA and CD-K4DLA**). The Permittee shall perform visible emissions observations as follows:

- Conduct a daily Method 22 test (40 CFR 60, Appendix A). The duration of each Method 22 test must be at least 15 minutes. If VE are observed during any daily VE test, promptly initiate and complete corrective actions according to the site-specific OM&M plan.
- If no VE are observed in 30 consecutive daily Method 22 tests for any kiln stack, the Permittee may decrease the frequency of Method 22 testing from daily to weekly. If VE are observed during any weekly test, promptly initiate and complete corrective actions, resume Method 22 testing of that kiln stack on a daily basis, and maintain that schedule until no VE are observed in 30 consecutive daily tests, at which time the Permittee

may again decrease the frequency of Method 22 testing to a weekly basis.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the required visible emissions observations are not performed or if visible emissions are detected.

- k. Once per calendar month, the Permittee shall ensure that the limestone feed system on a DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) replaces limestone at least as frequently as the schedule set during the performance test. Create and maintain a record of the monthly check in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if this requirement is not met.

Recordkeeping [15A NCAC 02Q .0508(f)]

- l. The Permittee shall maintain records of the production rates on a fired-product basis for each affected tunnel kilns (**ID Nos. ES-K1, ES-K2, ES-K3K, and ES-K4K**). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these records are not maintained.
- m. The results of inspection and maintenance at the tunnel kilns (**ID Nos. ES-K1 and ES-K2**) shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date of each recorded action;
 - ii. The results of each inspection; and,
 - iii. The results of any maintenance performed on the tunnel kilns.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these records are not maintained.
- n. The results of the visible emissions observations at the large tunnel kilns (**ID Nos. ES-K3K and ES-K4K**) shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109 if records of the monitoring results are not maintained.
- o. The Permittee shall maintain a record of each period when the large tunnel kilns are operated while bypassing the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) in order to perform routine maintenance. The records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request, and shall include:
 - i. The start date and start time of the routine maintenance;
 - ii. The stop date and stop time of the routine maintenance;
 - iii. A description of the maintenance activities; and,
 - iv. The total time the kiln has operated in by-pass, and the total percentage of the operating time the kilns have been operated in bypass for the previous 12-month period.

The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109 if these records are not maintained or if the percentage of time the kiln operates in bypass exceeds 4% of the annual operating time.

Reporting [15A NCAC 02Q .0508(f)]

- p. The Permittee must submit a Notification of Compliance Status within 60 days following the completion of the final required performance test. The Notification of Compliance Status must include the following information:
 - i. For the tunnel kilns (**ID Nos. ES-K1 and ES-K2**), a summary of the initial inspection required in Section 2.1.A.4.e. of this permit;
 - ii. A summary of the results of all performance tests conducted to demonstrate initial compliance as required in Section 2.1.A.4.c. and d. of this permit;
 - iii. The limestone feeder setting value established for the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) during the performance test;
 - iv. The source and grade of limestone used at the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) during the performance test; and,
 - v. A description of any routine maintenance that the Permittee will perform on the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**), during which the Permittee will continue operating the large tunnel kilns (**ID Nos. ES-K3K and ES-K4K**) while bypassing the control devices.
- q. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the

preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:

- i. Company name, facility ID number, and address;
- ii. Statement by the Responsible Official with that official's name, title, and signature certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete;
- iii. A description of routine maintenance performed while the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) were offline and the large tunnel kilns (**ID Nos. ES-K3K and ES-K4K**) were operating, including the following:
 - (A) The date and time when the DLAs was shutdown and restarted.
 - (B) Identification of the number of hours that the kilns operated while the DLAs was offline.
 - (C) The *total* amount of time (in hours and % of total operating time) that the associated kiln operated during the current semiannual compliance period and during the previous semiannual compliance period.
- iv. For each deviation from a limitation (emission limit, operating limit, or work practice standard), include the following information:
 - (A) The total operating time of each affected source during the reporting period.
 - (B) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

If there were no deviations from any of the applicable limitations, a statement that there were no deviations during the reporting period.

5. ALTERNATIVE OPERATING SCENARIOS [15A NCAC 02Q .0508(p)]

The Permittee, contemporaneously with making a change from one alternate operating scenario to another, shall record in a logbook (written or electronic format) the scenario under which it is operating.

B. One wood fuel/sawdust system consisting of:

two 8 x 8 screens (ID Nos. ES-WFS-SD-SC1 and ES-WFS-SD-SC2) controlled by two dust collectors (ID Nos. CD-SD-DC1 and CD-SD-DC2);
one cyclone (ID No. ES-WFS-SD-CYC) controlled by one dust collector (ID No. CD-SD-DC2);
one hammermill (ID Nos. ES-WFS-SD-HM) controlled by one cyclone and one dust collector (ID Nos. CD-WFS-SD-CYC and CD-SD-DC2);
one sawdust silo (ID No. ES-WFS-SD-SDS) controlled by one bin vent filter (ID No. CD-SD-BV1);
one surge hopper (ID No. ES-WFS-SD-SH) controlled by one bin vent filter (ID No. CD-SD-BV2);
transfer screw conveyor and screw feed conveyor (ID No. ES-WFS-SD-CV1 and ES-WFS-SD-CV2) controlled by one dust collector (ID No. CD-SD-DC1); and
one enclosed conveyor (ID No. ES-WFS-SD-CV3)

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	$E = 4.10P^{0.67}$ where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
visible emissions	20 percent opacity	15A NCAC 02D .0521(d)
Odors	Odorous emissions must be controlled - Section 2.2.A.; State-enforceable only	15A NCAC 02D .1806

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from this source shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67}$$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.B.1.a. above, the Permittee shall be deemed in noncompliance.

Monitoring [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from the wood fuel/sawdust system consisting of: two 8x8 screen (**ID Nos. ES-WFS-SD-SC1 and ES-WFS-SD-SC2**) controlled by two dust collectors (**ID Nos. CD-SD-DC1 and CD-SD-DC2**); one cyclone (**ID No. ES-WFS-SD-CYC**) controlled by one dust collector (**ID No. CD-SD-DC2**); one hammermill (**ID No. ES-WFS-SD-HM**) controlled by one cyclone and one dust collector (**ID Nos. CD-WFS-SD-CYC and CD-SD-DC2**); one sawdust silo (**ID No. ES-WFS-SD-SDS**) controlled by one bin vent filter (**ID No. CD-SD-BV1**); one surge hopper (**ID No. ES-WFS-SD-SH**) controlled by one bin vent filter (**ID No. CD-SD-BV2**); one transfer screw conveyor and screw feed conveyor (**ID Nos. ES-WFS-SD-CV1 and ES-WFS-SD-CV2**) controlled by one dust collector (**ID No. CD-SD-DC1**); and one enclosed conveyor (**ID No. ES-WFS-SD-CV3**). To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
- a monthly visual inspection of the system ductwork and material collection unit for leaks, and
 - an annual (for each 12-month period following the initial inspection) internal inspection of the cyclone's structural integrity.
- The Permittee shall be deemed in noncompliance with 2.1 B.1.a above if the ductwork and cyclone are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
 - the results of each inspection;
 - the results of any maintenance performed on any control device; and
 - any variance from manufacturer's recommendations, if any, and corrections made.
- The Permittee shall be deemed in non-compliance with 2.1 B.1.a. if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
- f. The Permittee shall submit, in writing a summary report of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the wood fuel/sawdust system (**ID Nos. ES-WFS-SD-SC1, ES-WFS-SC2, ES-WFS-SD-CYC, ES-WFS-SD-HM, ES-WFS-SD-SDS, ES-WFS-SD-SH, ES-WFS-SD-CV1, ES-WFS-CV2, and ES-WFS-SD-CV3**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping

- c. No monitoring or recordkeeping is required for visible emissions from these sources (**ID Nos. ES-WFS-SD-SC1, ES-WFS-SD-SC2, ES-WFS-SD-CYC, ES-WFS-SD-HM, ES-WFS-SD-SDS, ES-WFS-SD-SH, ES-WFS-SD-CV1, ES-WFS-SD-CV2, and ES-WFS-SD-CV3**) .

C. Natural gas-fired coatings rotary dryer (ID No. ES-CD-8) and associated bagfilter (ID No. CD-CD8BF)

The following table provides a summary of limits and/or standards for the rotary sand dryer.

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	$E=4.10 P^{0.67}$ where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
sulfur dioxide	2.3 pounds per million Btu	15A NCAC 02D .0516
visible emissions	20 percent opacity	15A NCAC 02D .0521(c)

1. 15A NCAC 02D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the coatings dryer (**ID No. ES-CD-8**) that are discharged into the atmosphere shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67}$$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.C.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping

- c. Particulate matter emissions from the coatings rotary dryer (**ID No. ES-CD-8**) shall be controlled by the bagfilter (**ID No. CD-CD8BF**). To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
 - ii. an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilter are not inspected and maintained.
- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the bagfilter; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting

- e. The Permittee shall submit the results of any maintenance performed on the bagfilter within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from the natural gas-fired coatings dryer (**ES-CD-8**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping

- c. No monitoring or recordkeeping is required for sulfur dioxide emissions from the firing of natural gas in this source (**ID No. ES-CD-8**).

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the coatings dryer (**ID No. ES-CD-8**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of this source for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.3. a. above.If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- #### D. Texturizing Operations consisting of:

sand silo system (ID No. ES-SS) controlled by one bin vent filter (ID No. CD-SS-BV3)

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	$E = 4.10 P^{0.67}$ for processes ≤ 30 tons per hour $E = 55.0 P^{0.11} - 40$ for processes > 30 tons per hour where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
visible emissions	40 percent opacity for ES-CR5 and ES-CR6 20 percent opacity for ES-CR7 and ES-CR8	15A NCAC 02D .0521(c) 15A NCAC 02D .0521(d)
odors	Odorous emissions must be controlled - Section 2.2.A. State-enforceable only	15A NCAC 02D .1806

i. a monthly visual inspection of the system ductwork and material collection units for leaks and

ii. an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilters' structural integrity.

The Permittee shall be deemed in noncompliance with Section 2.1 D.1.a and b. above, if the ductwork and bagfilters are not inspected and maintained.

- e. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the bagfilters; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- f. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
- g. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the two texturizing operations (**ID Nos. ES-CR5 and ES-CR6**) shall not be more than 40 percent opacity when averaged over a six-minute period [15A NCAC 02D .0521(d)]. However, six minute averaging periods may exceed 40 percent opacity not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity. [15A NCAC 02D .0521(c)]
- b. Visible emissions from the two texturizing operations and the sand silo system (**ID Nos. ES-CR7, ES-CR8, and ES-SS**) shall not be more than 20 percent opacity when averaged over a six-minute period [15A NCAC 02D .0521(d)]. However, six minute averaging periods may exceed 20 percent opacity not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02Q .0508(f)]

- c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test exceed the limit given in Section 2.1.D.2.a and b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

- d. **Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f)]

No monitoring or recordkeeping is required for visible emissions from these sources (**ID Nos. ES-CR5 and ES-CR6**).

E. Clay crushing, grinding, and screening operations including:

one NSPS-affected primary crusher (ID No. F-PC);
two NSPS-affected scalping screens (ID Nos. F-SS1 and F-SS2);
one NSPS-affected secondary crusher (ID No. F-SGS);
two NSPS-affected single deck finishing screens (ID Nos. F-FS1 and F-FS2);
one bank of seven finishing screens (ID Nos. F-FS3, F-FS4, F-FS5 through F-FS9);
two NSPS-affected finishing conveyors #4 and #5 (ID Nos. F-FC4 and F-FC5); and
one NSPS-affected intersite conveyor (ID No. F-C-CFBH)

The following table provides a summary of limits and/or standards for the clay crushing, grinding, and screening emission units.

Regulated Pollutant	Limits/Standards	Applicable Regulation
visible emissions	20 percent opacity	15A NCAC 02D .0521(d)
visible and particulate emissions	notification of the crusher capacity and 10 percent opacity at each NSPS affected screen and conveyor (F-FS5 through F-FS9 are not subject to Subpart OOO) 12 percent opacity limit on the secondary crusher or 7 percent opacity limit on the fugitive emission from the building opening	15A NCAC 02D .0524 (40 CFR 60.670, Subpart OOO)
Odors	Odorous emissions must be controlled - Section 2.2. A.; State-enforceable only	15A NCAC 02D .1806

1. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the primary crusher (**ID Nos. F-PC**), two scalping screens (**ID Nos. F-SS1 and F-SS2**), secondary crusher (**ID Nos. F-SGS**), two single deck finishing screens (**ID Nos. F-FS1 and F-FS2**), bank of seven screens (**ID Nos. F-FS3, F-FS4, F-FS5 through F-FS9**), two finishing conveyors #4 and #5 (**ID Nos. F-FC4 and F-FC5**), and intersite conveyor (**ID No. F-C-CFBH**) shall not be more than 20 percent opacity when averaged over a six-minute period [15A NCAC 02D .0521(d)]. However, six minute averaging periods may exceed 20 percent opacity not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test exceed the limit given in Section 2.1.E.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping

No monitoring or recordkeeping is required for visible emissions from these sources (**ID Nos. F-PC, F-SGS, F-FS1, F-FS2, F-FS3, F-FS4, FS5 through FS9 and F-C-CFBH**).

2. 15A NCAC 02D .0524: NSPS 40 CFR PART 60, SUBPART OOO - STANDARDS OF PERFORMANCE FOR NONMETALLIC MINERAL PROCESSING PLANTS.

- a. The primary crusher (**ID No. F-PC**), the two scalping screens (**ID Nos. F-SS1 and F-SS2**), the secondary crusher (**ID No. F-SGS**), the two finishing conveyors #4 and #5 (**ID Nos. F-FC4 and F-FC5**), the two single deck finishing screens (**ID Nos. F-FS1 and F-FS2**), two finishing screens (**ID Nos. F-FS3 and F-FS4**) and the intersite conveyor (**ID No. F-C-CFBH**) are affected facilities as designated in NSPS, Subpart OOO {40 CFR Part 60.670(a)}, and must adhere to any applicable requirements in Subpart A. In accordance with §60.670(d)(1), the above listed primary crusher (**ID No. F-PC**) and the two single deck finishing screens (and the two finishing screens (**ID Nos. F-FS1, F-FS2, F-FS3, and F-FS4**) are exempt from the provisions of 40 CFR Parts 60.672, 60.674, and 60.675.

Emission Standard(s) [15A NCAC 02D .0524].

- b. As required by 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.670, Subpart OOO, visible emissions from the NSPS-affected screens, conveyors, and secondary crusher (**ID Nos. FSS1, FSS2, F-FC4, F-FC5, F-C-CFBH, and F-SGS**) shall not exceed the 40 CFR 60.672(b) limit of ten (10) percent opacity OR for the **secondary crusher only**, by complying with 40 CFR 60.672(a) limits of 7% opacity from any vent of the building enclosure OR for 12% opacity from the **secondary crusher (ID No. F-SGS)**. Additionally, the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.670, Subpart OOO, including Subpart A "General Provisions."

Testing [15A NCAC 02D .0508(f)]

- c. If emissions testing is required, the testing shall be in accordance with the requirements of 15A NCAC 02D .0524 (40 CFR 60.670, Subpart OOO) and General Condition JJ. If test results exceed the applicable limit(s) as given in Section 2.1 E.2.b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f)]

- d. The Permittee shall observe each individual affected facility each month for any visible emissions which exceed “normal.” Should monthly observed emissions of an affected facility exceed the established normal visible emissions for that affected facility, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0524, **UNLESS**, an approved Method 9 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO, 15A NCAC 2D .0501(c)(8) and (18)) is performed for each affected facility and visible emissions are demonstrated to comply with the applicable limit(s) given in 60.672(b) and (c). If compliance for the affected facility cannot be demonstrated, then the affected facility shall be deemed to be in noncompliance with 15A NCAC 02D .0524.

Recordkeeping [15A NCAC 02Q .0508(f)]

- e. Results of monitoring shall be maintained in a logbook (written or electronic form). The following shall be recorded in the logbook:
- the results of the Permittee’s observation to establish normal;
 - the results of the Permittee’s monthly building fugitive emissions observation or the monthly opacity emissions observations for each source (**ID Nos. F-PC, F-SS1, FSS2, F-SGS, F-FC4, F-FC5, F-FS1, F-FS2, F-FS3, F-FS4, and F-C-CFBH**);
 - the date and time of each observation;
 - the time and any resulting action(s) taken to reduce emissions exceeding an applicable limit;
 - the date, time, and type of all corrective actions performed to prevent such an exceedance from re-occurring and a copy of any Method 9 opacity testing performed for the purpose of demonstrating compliance with the applicable emissions limit.

The Permittee shall be deemed in non-compliance with 2.1.E.2.b. if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- f. The Permittee shall submit a written summary report of the all monitoring and record keeping activities as follows:
- a report of any changes in existing facilities as specified in 40 CFR 60.676 - Reporting and record keeping, including equipment being replaced and the replacement equipment of affected facilities. This report shall be submitted to the Administrator as required.
 - a summary report of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
 - a report of any noncomplying emissions for all emissions which exceed the “no visible emission” limit of 40 CFR 60.672(e) or the applicable opacity limit(s) of 40 CFR 60.672(a), (b) and (c) as established using Method 9 compliance demonstrations conducted on an affected facility along with the determined cause of exceedance and the resulting corrective action taken.

Notification Reporting [15A NCAC 02D .0524].

- g. In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to **NOTIFY** the Regional Supervisor, DAQ, in **WRITING**, of the following:
- the date construction (40 CFR 60.7) or reconstruction (40 CFR 60.15) of an affected facility is commenced, postmarked no later than 30 days after such date; and
 - the actual date of initial start-up of an affected facility, postmarked within 15 days after such date.

F. One NSPS-affected grinding and screening operation (184 tons per hour maximum process rate) including:

one impact crusher (ID No. F-CH-C1)

two scalping screens (ID Nos. F-CH-SS1 and F-CH-SS2)

two hammermills (ID Nos. F-CH-H1 and F-CH-H2)

four finishing screens (ID Nos. F-CH-FS1 through F-CH-FS4)

seventeen conveyors (ID Nos. F-CH-FC, F-CH-SSFC, F-CH-P1, F-CH-P2, F-CH-RC, F-CH-BC, F-CH-CFC, F-CH-T1, F-CH-T2, F-CH-HFC1, F-CH-HFC2, F-CH-TC1, F-CH-TC2, F-CH-SFC1, F-CH-SFC2, F-CH-SFC3, F-CH-SFC4)

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
visible and particulate emissions	10 percent opacity for each screen, and conveyor, and 15 percent opacity for each crusher and hammermill OR “no visible emissions” from the building enclosing the affected facilities.	15A NCAC 02D .0524 (40 CFR 60.670, Subpart OOO)
odors	Odorous emissions must be controlled - Section 2.2. A.; State-enforceable only	15A NCAC 02D .1806

1. 15A NCAC 02D .0524: NSPS 40 CFR PART 60, SUBPART OOO - STANDARDS OF PERFORMANCE FOR NONMETALLIC MINERAL PROCESSING PLANTS.

- a. For each NSPS affected screen and conveyor (**ID Nos. F-CH-SS1, F-CH-SS2, F-CH-FS1 through F-CH-FS4, F-CH-FC, F-CH-SSFC, F-CH-P1, F-CH-P2, F-CH-RC, F-CH-BC, F-CH-CFC, F-CH-T1, F-CH-T2, F-CH-HFC1, F-CH-HFC2, F-CH-TC1, F-CH-TC2, F-CH-SFC1, F-CH-SFC2, F-CH-SFC3, F-CH-SFC4**) subject to the ten (10) percent opacity limit, the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(b) from each individual affected facility **OR** by complying with the 40 CFR 60.672(e) limit of “no visible emissions” from the un-vented building. For the crusher and two hammermills (**ID Nos. F-CH-C1, F-CH-H1, and F-CH-H2**), the Permittee shall meet the requirements of this Subpart by demonstrating compliance with the 40 CFR 60.672(c) particulate matter emissions limit of fifteen (15) percent opacity from each individual affected facility **OR** by complying with the 40 CFR 60.672(e) limit of “no visible emissions” from the un-vented building. Additionally for all NSPS affected facilities, the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR 60.670, Subpart OOO, including Subpart A "General Provisions

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be in accordance with the requirements of 15A NCAC 02D .0524 (40 CFR 60.670, Subpart OOO) and General Condition JJ. If test results exceed the applicable limit(s) as given in Section 2.1 F.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f)]

- c. Monitoring to ensure compliance with the applicable emissions standard(s) of 2.1 F.1.a. shall be performed by the Permittee as follows:
 - i. observation of a building enclosure containing affected facilities:
 - A. observe the building containing the grinding and screening operations each month for any fugitive visible emissions. Should any visible emissions be observed, each affected facility enclosed in the building shall be deemed to be in noncompliance with 15A NCAC 02D .0524 **UNLESS** a compliance demonstration for each affected facility enclosed in the building is performed in accordance with the following;
 - B. an approved Method 9 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO, 15A NCAC 02D .0501(c)(8) and (18)) is performed for each enclosed affected facility and visible emissions are demonstrated to comply with the applicable limit(s) given in 40 CFR 60.672(b) and (c). If compliance for the affected facility cannot be demonstrated, then the affected facility shall be deemed to be in noncompliance with 15A NCAC 02D .0524, **OR**
 - ii. observation of an individual affected facility enclosed in the building:
 - A. After the initial performance test required under 40 CFR 60.670, the Permittee shall observe each individual affected facility enclosed in the building each month for any visible emissions which exceed “normal.” Should monthly observed emissions of an enclosed affected facility exceed the established normal visible emissions for that affected facility, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0524, **UNLESS**,
 - B. an approved Method 9 (or Method 22 if observing an affected facility building enclosure) opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO, 15A NCAC 02D .0501(c)(8) and (18)) is performed for each enclosed affected facility and visible emissions are demonstrated to comply with the applicable limit(s) given in 40 CFR 60.672(b) and (c). If compliance for the affected facility

cannot be demonstrated, then the affected facility shall be deemed to be in noncompliance with 15A NCAC 02D .0524.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. Results of monitoring shall be maintained in a logbook (written or electronic form). The following shall be recorded in the logbook:
- the results of the Permittee's observation to establish normal;
 - the results of the Permittee's monthly building fugitive emissions observation or the monthly opacity emissions observations for each affected facility;
 - if option in Section 2.1 F.1.c.ii.A. is followed, the observation to establish normal should be recorded for each affected facility within the building.
 - whether the observed emissions source was the building or each affected facility within the building, the date and time of each observation, and
 - if any emissions were observed from the building or whether any emissions observed exceeded "normal," the time and any resulting action(s) taken to reduce emissions exceeding an applicable limit, and
 - the date, time, and type of all corrective actions performed to prevent such an exceedance from re-occurring and a copy of any Method 9 or Method 22 opacity testing performed for the purpose of demonstrating compliance with the applicable emissions limit(s).

The Permittee shall be deemed in non-compliance with Section 2.1.F.1.a. if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a written summary report of the all monitoring and record keeping activities as follows:
- a report of any changes in existing facilities as specified in 40 CFR 60.676 - Reporting and record keeping, including equipment being replaced and the replacement equipment of affected facilities. This report shall be submitted to the Administrator as required.
 - a summary report of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
 - a report of any noncomplying emissions for all emissions which exceed the "no visible emission" limit of 40 CFR 60.672(e) or the applicable opacity limit(s) of 40 CFR 60.672(a), (b) and (c) as established using Method 9 or 22 compliance demonstrations conducted on an affected facility or building, along with the determined cause of exceedance and the resulting corrective action taken.

Notification Reporting [15A NCAC 02D .0524].

- f. In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to **NOTIFY** the Regional Supervisor, DAQ, in **WRITING**, of the following:
- the date construction (40 CFR 60.7) or reconstruction (40 CFR 60.15) of an affected facility is commenced, postmarked no later than 30 days after such date; and
 - the actual date of initial start-up of an affected facility, postmarked within 15 days after such date.

G. One Concrete Block Plant including:

**one flyash silo (ID No. ES-BP-FAS) controlled by one bin vent filter (ID No. CD-BP-BV1),
one cement silo (ID No. ES-BP-CS) controlled by one bin vent filter (ID No. ES-BP-BV2)
and one batch mixer (ID No. ES-BP-BM) controlled by one bagfilter (ID No. CD-BP-BH1)**

The following table provides a summary of limits and/or standards for the clay crushing, grinding, and screening emission units.

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	$E = 4.10 P^{0.67}$ for processes ≤ 30 tons per hour $E = 55.0 P^{0.11} - 40$ for processes > 30 tons per hour where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515

visible emissions	20 percent opacity	15A NCAC 02D .0521(d)
toxic air pollutants	See Section 2.2. A.2, State-enforceable only	15A NCAC 02D .1100
toxic air pollutants	See Section 2.2. A.4, State-enforceable only	15A NCAC 02Q .0705

1. 15A NCAC 02D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the concrete block plant's flyash silo and cement silo (**ID Nos. ES-BP-FAS, and ES-BP-CS**) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67} \quad \text{Where } E = \text{allowable emission rate in pounds per hour}$$

$$P = \text{process weight in tons per hour}$$

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

- b. Emissions of particulate matter from the batch mixer (**ID No. ES-BP-BM**) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 55.0 \times P^{0.11} - 40 \quad \text{Where } E = \text{allowable emission rate in pounds per hour}$$

$$P = \text{process weight in tons per hour}$$

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test exceed the limit given in Section 2.1 G.1.a. and b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/ Recordkeeping [15A NCAC 02Q .0508(f)]

- d. Particulate matter emissions from the concrete block plant including: one flyash silo (**ID No. ES-BP-FAS**) controlled by one bin vent filter (**ID No. CD-BP-BV1**), one cement silo (**ID No. ES-BP-CS**) controlled by one bin vent filter (**ID No. ES-BP-BV2**) and one batch mixer (**ID No. ES-BP-BM**) controlled by one bagfilter (**ID No. Cd-BP-BH1**). To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the control device manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
- a monthly visual inspection of the system ductwork and material collection units for leaks and
 - an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilters' structural integrity.
- The Permittee shall be deemed in noncompliance with Section 2.1 G.1.a and b above if the ductwork and bagfilters are not inspected and maintained.
- f. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
 - the results of each inspection;
 - the results of any maintenance performed on the control devices; and
 - any variance from manufacturer's recommendations, if any, and corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- g. The Permittee shall submit the results of any maintenance performed on any control device within 30 days of a written request by the DAQ.
- h. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the concrete block plant (**ID Nos. ES-BP-FAS, ES-BP-CS, and ES-BP-BM**) shall not be more than 20 percent opacity when averaged over a six-minute period [15A NCAC 02D .0521(d)]. However, six minute averaging periods may exceed 20 percent opacity not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test exceed the limit given in Section 2.1 G.2.a. (above), the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping

No monitoring or recordkeeping is required for visible emissions from these sources (**ID Nos. ES-BP-FAS, ES-BP-CS, and ES-BP-BM**).

**H. One coal processing system;
one coal crusher (ID No. ES-Coal-CC) controlled by one bagfilter (ID No. CD-Coal-CC) and
one rumbler system (ID No. ES-RUMBLE) controlled by one bagfilter (ID No. CD-
RUMBLE)**

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	$E = 4.10P^{0.67}$ where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
visible emissions	20 percent opacity	15A NCAC 02D .0521(d)

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from one coal crusher (**ID No. ES-Coal-CC**) and one rumbler system (**ID No. ES-RUMBLE**) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67}$$

Where E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1. H.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from the coal processing system: one coal crusher (**ID No. ES-Coal-CC**) controlled by one bagfilter (**ID No. CD-Coal-CC**) and one rumbler system (**ID No. ES-RUMBLE**) shall be controlled by one bagfilter (**ID No. CD-RUMBLE**). To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the control device manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
- a monthly visual inspection of the system ductwork and material collection unit for leaks, and
 - an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the bagfilters; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the coal processing system (**ID No. ES-Coal-CC**) and the rumbler system (**ID No. ES-RUMBLE**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 H.2. a. above.If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2.2- Multiple Emission Source(s) Specific Limitations and Conditions

A. All emission sources

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	Odorous emissions must be controlled; State enforceable only	15A NCAC 02D .1806
Toxic air pollutants	Toxic air pollutant emissions shall not exceed their modeled acceptable ambient levels; State -enforceable only	15A NCAC 02D .1100
	Toxic air pollutant emissions shall not exceed the levels listed in 2Q .0711 unless ambient standards are not exceeded; State-enforceable only	15A NCAC 02Q .0711

State enforceable-only

1. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

- The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

State enforceable-only

- 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS**-Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limit shall not be exceeded:

EMISSION SOURCE(S)	TOXIC AIR POLLUTANT(S)	EMISSION LIMIT(S)
Brick Tunnel Kilns 1, and 2 (ID Nos. ES-K1 and ES-K2)	arsenic	5.05 pounds per year
Brick Tunnel Kiln 3 (ID No. ES-K3K)	arsenic	18.9 pounds per year
Brick Tunnel Kiln 4 (ID No. ES-K4K)	arsenic	18.9 pounds per year
Batch Mixer (ID No. ES-BP-BM)	arsenic	0.0065 pounds per year
Cement Silo (ID No. ES-BP-CS)	arsenic	0.00035 pounds per year
Flyash Silo (ID No. ES-BP-FAS)	arsenic	0.097 pounds per year
Brick Tunnel Kilns 1, 2, 3, and 4 (ID Nos. ES-K1, ES-K2, ES-K3K, and ES-K4K)	benzene	474 pounds per year
Brick Tunnel Kilns 1, and 2 (ID Nos. ES-K1 and ES-K2)	beryllium	0.0744 pounds per year
Brick Tunnel Kiln 3 (ID No. ES-K3K)	beryllium	2.18 pounds per year
Brick Tunnel Kiln 4 (ID No. ES-K4K)	beryllium	2.18 pounds per year
Cement Silo (ID No. ES-BP-CS)	beryllium	0.000044 pounds per year
Flyash Silo (ID No. ES-BP-FAS)	beryllium	0.00867 pounds per year
Brick Tunnel Kilns 1, and 2 (ID Nos. ES-K1 and ES-K2)	cadmium	5.28 pounds per year

EMISSION SOURCE(S)	TOXIC AIR POLLUTANT(S)	EMISSION LIMIT(S)
Brick Tunnel Kiln 3 (ID No. ES-K3K)	cadmium	2.70 pounds per year
Brick Tunnel Kiln 4 (ID No. ES-K4K)	cadmium	2.70 pounds per year
Batch Mixer (ID No. ES-BP-BM)	cadmium	0.000245 pounds per year
Cement Silo (ID No. ES-BP-CS)	cadmium	0.0000438 pounds per year
Flyash Silo (ID No. ES-BP-FAS)	cadmium	0.0019 pounds per year
Brick Tunnel Kilns 1, 2, 3, and 4 (ID Nos. ES-K1, ES-K2, ES-K3K, and ES-K4K)	chlorine	0.0534 pounds per hour 1.28 pounds per day (24-hour)
Brick Tunnel Kilns 1, and 2 (ID Nos. ES-K1 and ES-K2)	Soluble chromate as chromium VI	0.0316 pounds per day (24 hour)
Brick Tunnel Kiln 3 (ID No. ES-K3K)	Soluble chromate as chromium VI	0.0252 pounds per day (24 hour)
Brick Tunnel Kiln 4 (ID No. ES-K4K)	Soluble chromate as chromium VI	0.0252 pounds per day (24 hour)
Batch Mixer (ID No. ES-BP-BM)	Non-specific chromium (VI) compounds	0.044 pounds per year
Cement Silo (ID No. ES-BP-CS)	Non-specific chromium (VI) compounds	0.0254 pounds per year
Flyash Silo (ID No. ES-BP-FAS)	Non-specific chromium (VI) compounds	0.12 pounds per year
Brick Tunnel Kilns 1, 2, 3, and 4 (ID Nos. ES-K1, ES-K2, ES-K3K, and ES-K4K)	di (2-ethylhexyl) phthalate	15 pounds per day (24-hour)
Brick Tunnel Kilns 1, 2, 3, and 4 (ID Nos. ES-K1, ES-K2, ES-K3K, and ES-K4K)	fluorides	22.0 pounds per hour 528 pounds per day (24-hour)
Brick Tunnel Kilns 1, 2, 3, and 4 (ID Nos. ES-K1, ES-K2, ES-K3K, and ES-K4K)	hydrogen chloride	11.6 pounds per hour
Brick Tunnel Kilns 1, 2, 3, and 4 (ID Nos. ES-K1, ES-K2, ES-K3K, and ES-K4K)	hydrogen fluoride	25.42 pounds per hour 610 pounds per day (24-hour)
Brick Tunnel Kilns 1, 2, 3, and 4 (ID Nos. ES-K1, ES-K2, ES-K3K, and ES-K4K)	mercury	0.0801 pounds per day (24-hour)
Brick Tunnel Kilns 1, and 2 (ID Nos. ES-K1 and ES-K2)	Nickel	0.0222 pounds per day (24-hour)
Brick Tunnel Kiln 3 (ID No. ES-K3K)	Nickel	0.0356 pounds per day (24-hour)
Brick Tunnel Kiln 4 (ID No. ES-K4K)	Nickel	0.0356 pounds per day (24-hour)
Batch Mixer (ID No. ES-BP-BM)	Nickel	0.000238 pounds per day (24-hour)
Cement Silo (ID No. ES-BP-CS)	Nickel	0.0100 pounds per day (24-hour)
Flyash Silo (ID No. ES-BP-FAS)	Nickel	0.00060 pounds per day (24-hour)

- a. To ensure compliance with the above limits, the following restrictions shall apply:

- i. The combined feed rate shall not exceed 54,800 pounds per hour for kilns 1 and 2 (**ID Nos. ES-K1 and ES-K2**), and
 - ii. The combined feed rate shall not exceed 82,200 pounds per hour for kilns 3 and 4 (**ID Nos. ES-K3K and ES-K4K**).
 - iii. The combined production limit shall not exceed 259,226 tons of fired brick per year when firing coal for kilns 3 and 4 (**ID Nos. ES-K3K and ES-K4K**)
 - iv. The dry limestone adsorbers (DLA) (**ID Nos. CD-K3DLA and CD-K4DLA**) shall be operated for control of emissions of hydrogen chloride and hydrogen fluoride when the brick tunnel kilns (**ID Nos. ES-K3K and ES-K4K**) are in operation with following exception:
 - (A) the Permittee shall be allowed to bypass the DLA (**ID No. CD-K3DLA**) for routine control device maintenance and continue operation of the brick tunnel kiln (**ID No. ES-K3K**) for up to 4% of the annual operating uptime of the kiln.
 - (B) the Permittee shall be allowed to bypass the DLA (**ID No. CD-K4DLA**) for routine control device maintenance and continue operation of the brick tunnel kiln (**ID No. ES-K4K**) for up to 4% of the annual operating uptime of the kiln.
 - v. The bypass damper position (open or closed) associated with DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) shall be monitored and recorded when the brick tunnel kilns (**ID Nos. ES-K3K and ES-K4K**) is in operation.
 - vi. The limestone feeder setting of the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) shall be maintained at or above 110 pounds per hour averaged over a 24-hour block period.
 - vii. The DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) shall contain an adequate amount of limestone in the storage bin and hopper during operation.
 - viii. The Permittee shall use the same grade of limestone from the same source in the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) as used during the most recent performance test.
 - ix. The Permittee shall monitor and record electronically the bypass damper position (open or closed) associated with the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) at least every 15 minutes. In the alternative, a daily report showing the amount of open and/or closed time for the previous 24 hours may be generated from the plant computer. As a third alternative, manual log sheets may be used. The reason for each bypass event shall also be recorded in a logbook or by other electronic method.
 - x. The Permittee shall verify that the limestone hopper and storage bins (located at the top of the DLAs) contain adequate limestone by performing a daily visual check and recording the results in a logbook or by other electronic method.
 - xi. The Permittee shall record the limestone feeder setting daily in logbook or by other electronic method to verify that the feeder setting is being maintained at or above 110 pounds per hour.
 - xii. The Permittee shall maintain records of the source and type of limestone utilized in the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**) during the most recent performance test in a logbook or by other electronic method.
 - xiii. The Permittee shall monitor and record operating uptime of the brick tunnel kilns (**ID Nos. ES-K3K and ES-K4K**) and the downtime associated the routine control device maintenance of the DLAs (**ID Nos. CD-K3DLA and CD-K4DLA**).
- b. For compliance purposes, within 30 days after each calendar year quarter, regardless of the actual emissions, the maximum hourly combined feed rates for kilns 1 and 2 (**ID Nos. ES-K1 and ES-K2**) and for the kilns 3 and 4 (**ID Nos. ES-K3K and ES-K4K**) during each day of the reporting quarter shall be reported to the Regional Supervisor, DAQ.

State enforceable-only

3. 15A NCAC 02Q .0711: PERMIT REQUIREMENTS FOR TOXIC AIR POLLUTANTS

- a. Pursuant to 15A NCAC 02Q .0711 "Emission Rates Requiring a Permit," for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that facility-wide actual emissions do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 02Q .0711. The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility, including fugitive emissions, will not exceed TPERs listed in 15A NCAC 02Q .0711.
 - i. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
 - ii. PRIOR to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 02D.1100 "Control of Toxic Air Pollutants."

- iii. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

Pollutant (CAS Number)	Carcinogens (lb/yr)	TPER Limitations		Acute Irritants (lb/hr)
		Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	
bromine (7726-95-6)				0.052
Carbon disulfide (75-15-0)		3.9		
cresol (1319-77-3)			0.56	.
p-dichlorobenzene (106-46-7)				16.8
ethyl mercaptan (75-08-1)			0.025	
formaldehyde (50-00-0)				0.04
n-hexane (110-54-3)		23		
Hexane isomers except n- hexane				92
manganese and compounds		0.63		
Methyl isobutyl ketone (108-10-1)		52		7.6
Methyl mercaptan (74-93-1)			0.013	
nitrobenzene (98-95-3)		1.3	0.13	
pentachlorophenol (87-86-5)		0.063	0.0064	
polychlorinated biphenyls (1336-36-3)	5.6			
Styrene (100-42-5)			2.7	
Non-specific chromium (VI) compounds, as chromium (VI) equivalent (zinc chromate (13530-65-9))	0.0056			

SECTION 3 - GENERAL CONDITIONS (version 4.0 12/17/15)

This section describes terms and conditions applicable to this Title V facility.

- A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
 2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
 3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
 4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore,

nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.

5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q .0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]

The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.

5. Reopening for Cause [15A NCAC 02Q .0517]

The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:

- a. changes in the information submitted in the application;
- b. changes that modify equipment or processes; or
- c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]

- a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
- c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
- d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.

3. Off Permit Changes [15A NCAC 02Q .0523(b)]

The Permittee may make changes in the operation or emissions without revising the permit if:

- a. the change affects only insignificant activities and the activities remain insignificant after the change; or
- b. the change is not covered under any applicable requirement.

4. Emissions Trading [15A NCAC 02Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A. **Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and

- d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) – FEDERALLY-ENFORCEABLE ONLY**

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. Specific Permit Modifications [15A NCAC 02Q.0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound